DEC STD 005-4 PROCEDURE FOR HANDLING A COMPONENT ALERT

DOCUMENT IDENTIFIER: A-DS-EL00005-04-0 Rev A1, 12-Jul-1989

ABSTRACT: This document describes how a Component Alert message is authorized and issued to alert the designated groups of a component found to be unreliable and/or having performance problems, not involving Serious Functional Defects or Product Safety.

APPLICABILITY: This standard is mandatory for any Digital employee who reports component problems.

STATUS: APPROVED 12-Jul-1989; type $ VTX SMC for expiration date.

This document is confidential and proprietary. It is an unpublished work protected under the Federal copyright laws.

© Digital Equipment Corporation. 1989. All rights reserved.

DEC STD 005-4 PROCEDURE FOR HANDLING A COMPONENT ALERT

DOCUMENT IDENTIFIER: A-DS-EL00005-04-0 Rev A1, 12-Jul-1989

REVISION HISTORY:	Rev A,	27-Apr-1987	
	Rev A1,	12-Jul-1989	ECO Number CTS01
Document Management Category:	Product Criteria/Waiver (TPW)		
Responsible Department:	Laboratory Services and Technical Information		
Responsible Person:	Paul Rey		

APPROVAL: This document has been recommended for approval by the General Review Group for its category. It has been updated by the standard owner with clerical changes only.

Paul Rey, Functional Component Engineering Manager

Eric Williams, Standards Process Manager

Direct requests for further information to:

Paul Rey

NRO5/I4, DTN: 234-4380, SKYHWK::REY

Copies of this document can be ordered from:

Standards and Methods Control

$ VTX SMC, JOKUR::SMC, DTN: 287-3724, or NRO4/D4

Please provide your name, mailstop, cost center, badge number, and node address when ordering.

CONTENTS

1 INTRODUCTION 1
1.1 COMPONENT ALERT OVERVIEW 1
1.2 SCOPE 1
1.3 RESPONSIBILITY 2
1.3.1 Responsible Person 2
1.3.2 Component Engineer 2
1.3.3 CAL Issuing Authority 2
1.3.4 Plant Quality Manager 2

2 PROCEDURE 2
2.1 NOTIFICATION AND DISTRIBUTION 5
2.2 CAL DISTRIBUTION LIST 6
2.3 ACKNOWLEDGMENT 6
2.4 NON-CAL PROCEDURES FOR OTHER DEFECTS 6

3 RECOMMENDED ACTIONS 6
3.1 RECOMMENDED MANUFACTURING ACTION 6
3.1.1 Component Inventory (select one) (specified by component engineer or originator) 6
3.1.2 Manufacturing Reply 7
3.2 RECOMMENDED FIELD SERVICE ACTIONS 7
3.2.1 Component Inventory (select one) (specified by component engineer or originator) 7
3.2.2 Field Service Reply 7

4 FOLLOW-UP RESPONSIBILITY 7
4.1 RECORD RETENTION 8
4.2 COMPONENT ENGINEER 8

5 FUTURE GOALS 8

Appendix A CROSS GROUP COMPONENT ENGINEERS 9

Appendix B COMPONENT ALERT FORM 11

Appendix C REFERENCE DOCUMENTS 13

C.1 EL-class Digital Documents 13

FIGURES

1 Component Alert Procedures Flow Chart 4

1 INTRODUCTION

1.1 COMPONENT ALERT OVERVIEW

A Component Alert (CAL) message is a rapid, formal notification issued to key company organizations, alerting them to a component performance problem and providing a strategy for minimizing its detrimental impact on the quality, reliability, and cost of the final product. If possible, the CAL message should provide a solution to the problem, otherwise, the solution should follow as soon as possible.

The CAL message applies only to component reliability and/or performance. It does not direct itself to safety issues or component defects that can cause a serious product functionality problem. Safety defects or Serious Functional Defects are covered by *DEC STD 005-0 Operational Alert (OPAL) Procedure.*

1.2 SCOPE

Component Alerts deal with serious (not minor or frivolous) component reliability, performance, availability or cost problems that can negatively impact Digital products in the following manner:

a. Product Functionality

b. Product Reliability

c. Manufacturing Cost

d. Inventory Cost

e. Service Cost

f. Product availability

The Component Alert provides a quick means of generating actions directly at the plant level where the serious problem can rapidly be contained for minimum negative product and cost impact. This then allows time for a long term and well thought out solution to be developed and implemented through the normal ECO cycle. Component Alerts should not be issued for minor (frivolous) component non-conformance problems.

The Component Alert should be used at the specific plant, region, area or Corporate level (where the problem exists) to disseminate information and recommended actions.

Component Alerts are not to be used for Product Safety or Serious Functional Defect problems. Problems of this nature must be forwarded as follows:

Product Safety Problem	Field Service Product Safety DTN: 276-9242, OGO1-1/H17, HARPO::HOYT
Serious Functional Defect Problem	Appropriate Group Quality Manager

NOTE

Linkages do exist between Component Alerts and OPALs (Operational Alert Procedure). A Component Alert may be issued as the result of the investigation of an OPAL at the direction of those responsible for the investigation. Additionally, safety/serious defects may be discovered during Component Alert processing and therefore must be processed as an OPAL, DEC STD 005-0.

Although the CAL would not impact the Corporation in a criminal legal manner, it does carry business liability ramifications if not expressed correctly. The CAL should never state questionable vendor or supplier judgments and, in uncertain cases, the Law Department should be contacted for guidance.

1.3 RESPONSIBILITY

1.3.1 Responsible Person

Any person discovering a component performance or reliability problem is responsible for notifying the cognizant component engineer.

1.3.2 Component Engineer

The component engineer is responsible for writing the Component Alert, and adhering to the requirements of this standard. The component engineer is also responsible for the technical content of the CAL, follow through, and final closure of any action taken.

Component engineers are required to acknowledge receipt of component performance or reliability problems within 48 hours and perform analysis and make recommendations or provide a solution plan within 5 working days.

1.3.3 CAL Issuing Authority

The issuing authority for a CAL shall be the Cross Group Engineer responsible for the specific class/commodity of component. For the Cross Group Component Engineer List, see Appendix A.

1.3.4 Plant Quality Manager

Plant Quality Managers are responsible for implementing the action to be taken within their plant and for sending CAL receipt confirmations.

2 PROCEDURE

The procedure for handling a request for a component alert is as follows (see Figure 1 for the Component Alert Procedure Flow Chart):

1. A request for a component alert is received by the responsible component engineer.

   NOTE

   The component engineer must acknowledge receipt of the request within 48 hours of receipt.

2. The component engineer is required to analyze the problem and recommend a solution or provide a solution plan within 5 working days.
3. If the subject component is a primary line component or may cause harm or injury or is causing a serious product functional problem, the following applies:

   The Component Engineer must contact the Field Service Product Safety Group, DTN: 276-9242 or HARPO::HOYT in order to determine whether a Component Alert is considered sufficient or if an Operational Alert (OPAL) is required, in accordance with DEC STD 005-0.

4. For component defects that cause serious product functionality problems (not safety), the appropriate Group Quality Management should also be notified (see DEC STD 005-0).

NOTE

Given the nature of these problems, it is strongly recommended that the communications as well as the investigation process and any statements about the issue be properly documented and worded to avoid unnecessary complications.

5. If an Operational Alert does not apply, a CAL message is developed by the component engineer. Refer to Appendix B for a sample of the Component Alert Form. Additional information regarding the completion of the form is as follows:

   a. The problem must be identified and the solution specified in the message section of the CAL form.

   b. The checklists under subheads 3.1 and 3.2 of this Digital standard should be used as guidelines in recommending appropriate disposition of component inventories.

   c. If the alert includes a time compliance section, the time period and feedback process will be specified in the message.

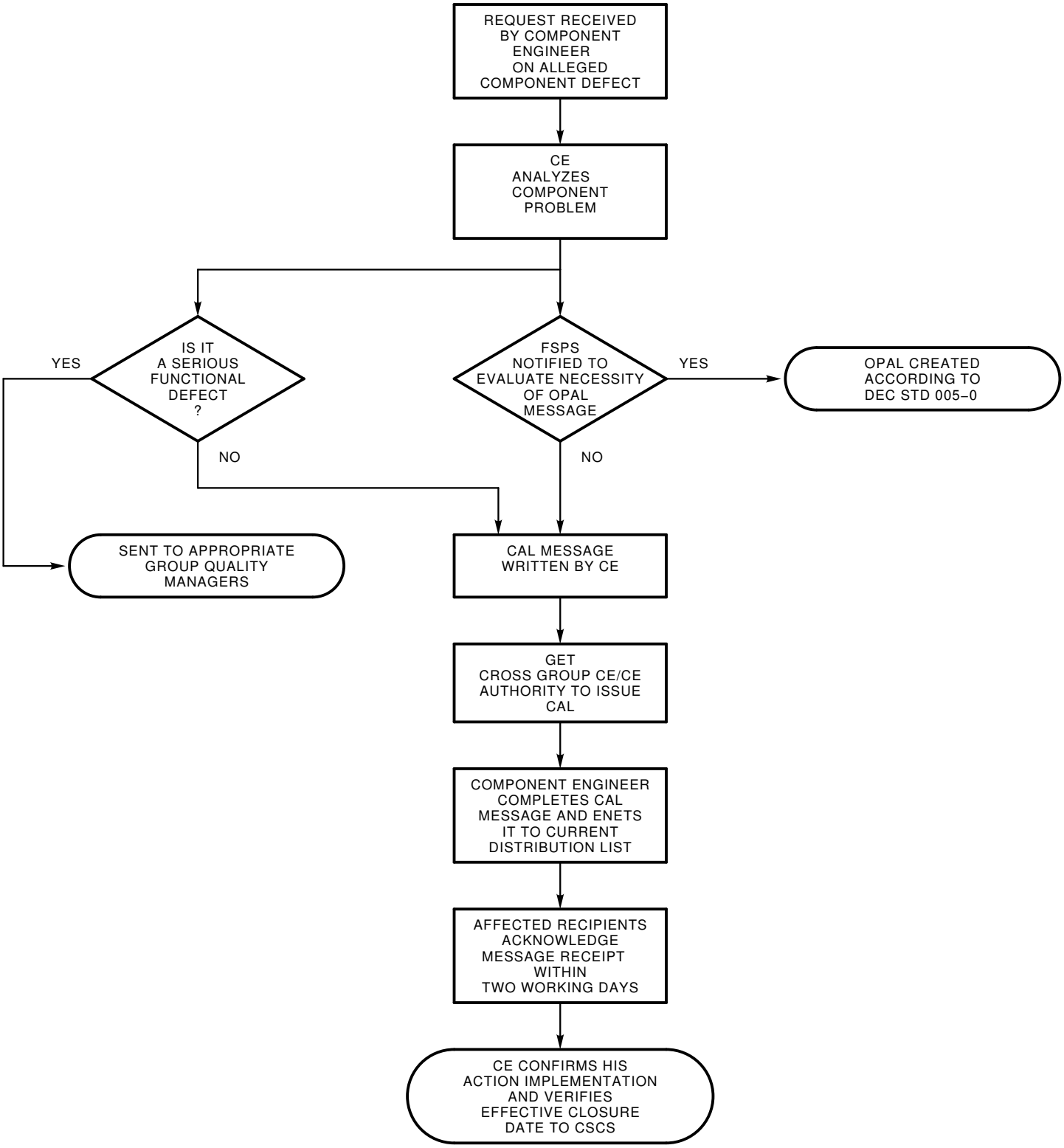
   d. A list of the lowest level assemblies on which the part is used and a list of the options that contain these assemblies must also be included.

NOTE

This information can be obtained from the APPIX (Automated Part and Product Information Exchange, formerly EPLS) Used On Function. If an APPIX account is required, contact Joe Kaskiewicz - DTN: 234-4124, SKYHWK::KASKIEWICZ.

   e. Electronic distribution over ENET, as described under subhead 2.1, is the preferred method of distribution.

Figure 1: Component Alert Procedures Flow Chart


REQUEST RECEIVED BY COMPONENT ENGINEER ON ALLEGED COMPONENT DEFECT
CE ANALYZES COMPONENT PROBLEM
IS IT A SERIOUS FUNCTIONAL DEFECT ?
YES
NO
FSPS NOTIFIED TO EVALUATE NECESSITY OF OPAL MESSAGE
YES
NO
OPAL CREATED ACCORDING TO DEC STD 005–0
SENT TO APPROPRIATE GROUP QUALITY MANAGERS
CAL MESSAGE WRITTEN BY CE
GET CROSS GROUP CE/CE AUTHORITY TO ISSUE CAL
COMPONENT ENGINEER COMPLETES CAL MESSAGE AND ENETS IT TO CURRENT DISTRIBUTION LIST
AFFECTED RECIPIENTS ACKNOWLEDGE MESSAGE RECEIPT WITHIN TWO WORKING DAYS
CE CONFIRMS HIS ACTION IMPLEMENTATION AND VERIFIES EFFECTIVE CLOSURE DATE TO CSCS

2.1 NOTIFICATION AND DISTRIBUTION

A component engineer who wants to issue a Component Alert (CAL) message should access the following ENET node:

OWL::CAL_FORM

The CAL_FORM account has been set up on the OWL node to enable component engineers to manage their Component Alerts electronically, without additional assistance. The ENET node provides the following:

— Instructions (how to proceed)

— Electronic delivery of a blank CAL form

— Sequential CAL number assignment

— Electronic distribution of the CAL to the current distribution list.

— Electronic filing of issued CALs

To access this node:

$ SET HOST OWL

USER:CAL_FORM

The screen presents:

1. Instructions
2. Blank CAL form
3. Log out

1. If you select 1, instructions will be provided on how to proceed.
2. If you select 2, a blank CAL form will be delivered to your VAXmail (ENET) mail account and will also identify your specific CAL number.
   a. Follow the instructions provided.
   b. When the message appears on your screen that the blank CAL form has arrived in your mail file, read the file as if it were mail, THEN, do the following:

      MAIL> FOR/EDIT
      TO: OWL::CAL_DIST
      SUBJ: (For example) Component Alert No. 27 - 10-12345-00

      Where 27 is the number assigned to the blank CAL that you received from OWL::CAL_FORM and 10-12345-00 is the part number in question.

   c. Go into "edit" mode and fill out the CAL form.
      Press Control Z and type Exit when finished.

NOTE

The completed CAL form will be electronically distributed through CAL_DIST, which contains the most current CAL distribution list. Additionally, the distributed CALs are filed under CAL_FORM as a historical file (privileged access only at this time).

3. If you select 3, "Log Out", you will log out of the CAL_FORM account.

2.2 CAL DISTRIBUTION LIST

The CAL distribution list is maintained by CSCS (Central Specification Control Systems). To add, delete, or change the distribution list, contact:

CSCS
DTN: 234-4954, ENET SKYHWK::SPOC

or

Paul Rey
DTN: 234-4380, OWL::REY

2.3 ACKNOWLEDGMENT

Recipients of a CAL message who are impacted by the alert problem must acknowledge receiving the message by ENET or a telephone call to the originator within two working days. Each recipient is responsible for having a documented internal response system for CAL messages.

2.4 NON-CAL PROCEDURES FOR OTHER DEFECTS

The CAL system is to be used only to communicate actions to be taken on component problems as described under subhead 1.2. It is not to be misused to communicate technical tips or product operating instructions or minor component non-conformance problems.

The CAL message does not replace an Engineering Change Order (ECO) or a Field Change Order (FCO). However, an ECO or FCO may often follow a CAL message.

3 RECOMMENDED ACTIONS

The following are the recommended action selections to be entered on the Component Alert Form (see Appendix B).

3.1 RECOMMENDED MANUFACTURING ACTION

3.1.1 Component Inventory (select one) (specified by component engineer or originator)

a. Scrap and return to vendor for credit and or replacement.

b. Scrap and return to (other - specify).

c. Return to Incoming Inspection for screening.

d. Other (specify).

3.1.2 Manufacturing Reply

Manufacturing will reply to originator or component engineer, as to what action should be taken if requested to do so during the alert.

3.2 RECOMMENDED FIELD SERVICE ACTIONS

3.2.1 Component Inventory (select one) (specified by component engineer or originator)

a. Scrap and return to vendor for credit and or replacement.

b. Scrap and return to (other - specify).

c. Return to Incoming Inspection for screening.

d. Other (specify).

3.2.2 Field Service Reply

Field Service will reply to originator or component engineer, as to what action should be taken, if requested to do so during the alert.

3.2.2.1 Modules Coming Back for Repair (select one) (specified by the responsible Field Service Module Repair Quality organization)

a. Replace part at the Repair ECO Station.

b. Perform special test (specify) to screen out defect.

c. No action is required if the part is working at normal module test.

d. All parts that fail and are removed during (Time Period) are to be collected (along with charges) and submitted to Incoming Inspection.

e. Other (specify).

3.2.2.2 Modules in the Field - Not Installed (select one) (specified by the responsible Field Service Module Repair Quality organization)

a. Recall, screen out defects and repair. Cost to be submitted to Incoming Inspection.

b. No action required.

3.2.2.3 Modules in the Field - Installed (select one) (specified by the responsible Field Service Module Repair Quality organization)

a. No action required.

b. Swap modules and replace defective - submit parts and costs to Incoming Inspection.

4 FOLLOW-UP RESPONSIBILITY

The Component Engineer issuing the Component Alert is responsible to ensure that all action items associated with the Alert are completed satisfactorily. The Component Engineer is also responsible for the satisfactory resolution of any other component part issues resulting from the Alert such as Vendor, incoming inspection, specification or other problems.

4.1 RECORD RETENTION

Completed corrective action is confirmed and, after confirmation, sent to CSCS by the component engineer.

CSCS maintains the originals of all CAL messages in their Files. Information on previous issued CALs can be obtained from:

Central Specification Control Systems
DTN: 234-4954 or SKYHWK::SPOC

4.2 COMPONENT ENGINEER

The Component Engineer shall maintain a copy of the CAL and Closure Notice. The Component Engineer shall also verify implementation of the corrective action and its closure by the date specified in the CAL. Closure information and closure verification shall be sent to CSCS over DTN: 234-4954 or ENET SKYHWK::SPOC.

5 FUTURE GOALS

The goal for the future is to have the entire CAL System automated electronically. The automated features will be:

a. Assigning Alert Numbers

b. Electronic Delivery of CAL Forms

c. Distribution List Database

d. Privileged Distribution List updating

e. CAL Distribution

f. Auto Closure reminder

g. CAL Database Inquiry by:

Plant	Vendor
FCD	Assembly
Part No.	Used on Option

APPENDIX A

CROSS GROUP COMPONENT ENGINEERS

CLASS	COMMODITY	NAME	DTN TEL	NODE[1]
10	CAPACITORS	CHARLIE LAHAYE	223-8061	MILVAX
11	DIODES/ CROSS CLASS OPTO'S	JOHN FUNARO	234-4888	NRADM
12	SWITCHES	GIL WOOLLEY	223-7871	ASABET::G_WOOLLEY
	RELAYS	JOHN SHAW	226-5035	DELNI::J_SHAW
	SOLENOIDS	GIL WOOLLEY	223-7871	ASABET::G_WOOLLEY
	FUSES	JOHN SHAW	223-5035	DELNI::J_SHAW
	CONTACTORS	NELSON CARBONELL	227-3105	NACMIS
	CIRCUIT BREAKERS	JOHN SHAW	226-5035	DELNI::J_SHAW
	MECHANICAL	DAVE SCHMIDT	237-3519	ELWOOD
	MOTORS	GIL WOOLLEY	223-7871	ASABET::G_WOOLLEY
	HEAT TRANSFER	ED LEE	223-8162	MILVAX
	AUDIO TRANSDUCERS	RON ROSCOE	223-9236	MILVAX
	CONNECTORS	ED CLASSON	234-4907	COBRA
	COOLING	JASON PEI	234-4913	COBRA
	EMI FILTERS	BARRY WILLIAMS	234-5381	NRADM::BWILLIAMS
13	RESISTORS/SIPS	JOHN SHAW	226-5035	DELNI::J_SHAW
14	PWB MATERIALS	GERRY GAGNON	226-2037	BOARDS
15	TRANSISTORS	ROGER LACHAPELLE	223-8046	MILVAX
16	MAGNETICS	HARRY SHAH	223-8251	MILVAX
	DELAY LINES	JOE COLLINS	227-3104	DELNI::JCOLLINS
17	CABLE ASSEMBLIES:			
	GENERAL	VAN HUYNH	234-5380	NRADM
	COMMUNICATIONS	LANCE MACLELLAN	227-3141	DELNI

[1] Use NODE:: and person's last name unless otherwise indicated

CLASS	COMMODITY	NAME	DTN TEL	NODE[1]
	OPTICAL	NELSON CARBONELL	227-3105	DELNI
	POWER CORDS	JOHN DWYER	223-8313	MILVAX
	MOLDED CABLES	JOHN DWYER	223-8313	MILVAX
18	CRYSTALS/ OSCILLATORS	ROGER LACHAPELLE	223-8046	MILVAX
20	HYBRIDS	DENNIS JOHNSON	551-5971	KAHUNA::JOHNSON
	DRAM SIPs	PAUL CIANCI	237-3403	MEMORY
30	POWER SUPPLIES	P.S. VENKATRAMAN	234-4884	JOULE::VENKI
	BUY-OUT SUPPORT		226-6535	
	UPS	SAM KAPREILIAN	234-5059	FRAGLE
36	LABELS	DENNIS MATTSON	223-5711	SKETCH
50	PWB BARE	GERRY GAGNON	226-2037	BOARDS
74	MECHANICAL FAB	DAVE SCHMIDT	237-3519	ELWOOD
90	HARDWARE	DAVE SCHMIDT	237-3519	ELWOOD
91	WIRE/CABLE	LANCE MACLELLAN	285-6189	NFL
99	PACKAGING:			
	MATERIALS	NELSON SIMKINS	223-3882	INABOX
	COMP CARRIERS	STEVE SPAULDING	247-2301	PARITY

[1]Use NODE:: and person's last name unless otherwise indicated

EXCEPTION IS CLASS 19, 21, 23

The cross group CE will not work group-specific problems (except for his or her group) but will act as the commodity technical representative at pin wheel meetings, steering committees, and component quality meetings. He or she will act as a technical resource to the ERM specialist and should be the leader in technology forums.

ALL CLASSES

When a vendor-specific technical issue arises, it will be the job of the CE cross group representative to inform his or her counterparts in other groups of the issue and to get the problem resolution back to the vendor and/or ERM. As in the past, it will be the group-specific CE's responsibility to work the issue for his or her group and to request cross group CE support if needed.

APPENDIX B

COMPONENT ALERT FORM

PART NAME	ALERT NO.	DATE	PRODUCT SAFETY IMPLICATIONS YES NO
DEC PLANT/LOC	DEC PART NUMBER	DEC DATE CODE	DEC LOT NUMBER
VENDOR PART NUMBER	VENDOR DATE CODE	VENDOR LOT NUMBER	
MANUFACTURER/CUSTOMER REPORTING PROBLEM			
VENDOR NUMBER	REFERENCE	ATTACHMENTS	
PROBLEM SITUATION AND CAUSE			
ACTIONS/RECOMMENDATIONS/INVENTORY ACTION			
LOWEST LEVEL ASSEMBLIES USED ON	OPTIONS USED ON		
CANCELLATION EFFECTIVITY	CLOSURE VERIFICATION (Name/Date)		
DATE MFG. NOTIFIED	SPECS/PROCEDURES AFFECTED		
ISSUANCE AUTHORITY (Cross Group Component Engineer)	CONTACT POINT FOR INFO (C.E. Name/affiliation/phone)		
ALERT ORIGINATOR (Name/Affiliation)	SIGNATURE OF ORIGINATOR		

APPENDIX C

REFERENCE DOCUMENTS

C.1 EL-class Digital Documents

EL-class Number	Document Title
EL-00005-00	*DEC STD 005-0 Operational Alert (OPAL) Procedure*

Copies of Digital EL-class documents may be obtained from

Standards and Methods Control
$ VTX SMC, JOKUR::SMC, DTN: 234-4423, or NRO4/D4

Please provide your name, mailstop, cost center, badge number, and node address when ordering.

```
+-------------------------------------------------------------------+
|                        READER COMMENTS                            |
|                                                                   |
| Your  comments  and suggestions  will help  Standards and Methods |
| Control improve their services and documents.                     |
+-------------------------------------------------------------------+
```

Did you request this document? _____ If so, did it arrive within a satisfactory period of time? _____ Please comment.

What are your impressions of this document? Consider format, organization, completeness, readability, and illustrations.

——————————————— **FOLD ON THIS LINE**——————————— ————————

Did you find technical or clerical errors in this document? If so, please specify the page number(s) and the error(s).

Are the instructions for the update package clear? _____
Was an index available? _____ If not, is one needed? _____
Do you have other suggestions for improving this document?

The following information is optional:

Name _____ Mailstop _____

Department _____ Node _____

Send your comments to JOKUR::PROJECTS, or fold, staple, and send this page through interoffice mail to:

```
+------------------------------+
|       READERS' COMMENTS      |
| STANDARDS AND METHODS CONTROL |
|           NRO4/D4            |
+------------------------------+
```